Utility Patent Application

CONFIDENTIAL INFORMATION

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IMPROVED REVERSIBLE ZIPPER FLY COVER AND METHOD FOR MANUFACTURING THE SAME

RELATED APPLICATIONS

There are no previously filed, nor currently any co-pending applications, anywhere in the world.

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates generally to reversible pants and, more particularly, to an improved zipper fly cover and method for manufacturing the same for use in making reversible pants.

2. Description of the Related Art

In the related art, reversible zippers are known. However, a problem

occurs when attempting to manufacture a zippered reversible pant. Particularly, because the zipper closure of a pant generally is formed having a zipper-fly cover, in order to manufacture such a garment utilizing conventional reversible zippers the designer must necessarily designate an "in" side and an "out" side prior to manufacture. As such, the "in" size inevitably suffers aesthetically using conventional manufacturing techniques.

Attempts have been made to correct for the foregoing problem, but result in an aesthetic compromise, such as the use of a patch-type fly cover, as shown in U.S. Patent No. 6,182,296, issued in the name of Hosogai.

A search of the prior art did not disclose any patents that read directly on the claims of the instant invention; however, the following references were considered related:

U.S. Pat. No.	Inventor	Issue Date
6,182,296	Hosogai	Feb. 6, 2001
D 439,727	Hosogai	Apr. 3, 2001
D 430,385	Hosogai	Sep. 5, 2000
D 428,548	Hosogai	Jul. 25, 2000
5,628,003	Goodale	May 13, 1997

Of considerable relevance is U.S. Patent No. 6,182,296, issued to the inventor. While a reversible zipper fly is incorporated into this invention in combination, other elements are different enough as to make the combination distinguished over the inventors' own prior art.

Consequently, a need has been felt for providing an apparatus and method which overcomes the aesthetic compromises that must be incurred in designing a reversible, zipper closed pant garment.

SUMMARY OF THE INVENTION

It is therefore an object of the present invention to provide an improved reversible zipper fly cover.

It is another object of the present invention to provide an improved reversible zipper fly cover for incorporation into a reversible pant garment.

It is yet another object of the present invention to provide a method for manufacturing an improved reversible zipper fly cover for incorporation into a reversible pant garment.

It is yet another object of the present invention to provide a symmetric reversible zipper fly cover, being symmetric whether formed "inside" or "outside".

It is a feature of the present invention to provide an improved reversible zipper fly cover that is aesthetically consistent on both the inside and outside of the garment, as well as being aesthetically pleasing on both sides.

Briefly described according to one embodiment of the present invention, a reversible zipper fly cover is formed for connecting a pair of pant panels utilizing an otherwise conventional zipper having a traveler incorporating a reversible

traveler guide. A zipper flap is formed symmetrically about each panel and the attachment strips of the zipper attached thereto by stitching. Next, the inner fly flap is formed by stitching one flap to its respective panel; and, the outer fly flap is thereafter formed by stitching the next flap to its respective panel. A crotch seam is thereafter extended laterally downward in an otherwise conventional manner.

In accordance with the preferred embodiment, a reversible, zipper closed pant garment can be formed that overcomes any aesthetic compromises in design.

BRIEF DESCRIPTION OF THE DRAWINGS

The advantages and features of the present invention will become better understood with reference to the following more detailed description and claims taken in conjunction with the accompanying drawings, in which like elements are identified with like symbols, and in which:

FIG. 1 is a front perspective view showing a first panel zipper flap and a second panel zipper flap for use in forming an improved reversible zipper fly cover according to the preferred embodiment of the present invention;

FIG. 2 is a partial exploded, front perspective view showing a reversible zipper element attached to the first panel zipper flap and the second panel zipper

flap thereof;

FIG. 3 is a front perspective view thereof showing the formation of an inner flap cover therein;

FIG. 4 is a front perspective view thereof showing the formation of an outer flap cover and crotch seam therein; and

FIG. 5 is a front perspective view of a finish front pant panel utilizing the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

In order to describe the complete relationship of the invention, it is essential that some description be given to the manner and practice of functional utility and description of the operation of a conventional zipper. A traveler slides from a base along a pair of aligned slides each supporting a plurality of aligned zipper elements. As the traveler is advanced from the base to a stop, zipper elements interlock to bind the respective slides of the sipper. The stops are sufficiently large that they will not permit the traveler to pass beyond the end section.

Of a particular adaptation, a reversible zipper utilizes a reversible traveler that has a traveler guide that can be positioned at or accessed from either the front or rear of the zipper assembly.

1. Detailed Description of the Figures

The best mode for carrying out the invention is presented in terms of its preferred embodiment, herein depicted within being formed sequentially in Figures 1-4. As shown in FIG. 1, a first panel 10 is prepared to be connected to second panel 12 via an otherwise conventional reversible zipper (not shown) by formation of a first panel zipper flap 14, attached to the first panel 10 by a finished seam 15. The second panel 12 is similarly prepared by formation of a second panel zipper flap 16, attached to the second panel 12 by a finished seam 17. Although for purposes of disclosing the best mode of practicing the present invention the first panel 10 and second panel 12 are envisioned as being right and left front pant panels, respectively, such an embodiment is merely for example, and not by way of limitation in that the current invention is envisioned as being applicable to other reversible garment applications.

Referring to FIG. 2, a slide fastener 20 is shown having a first slide 22a formed into a first attachment strip 22 is aligned with a second slide 22b formed into a second attachment strip 24 and affixed at a base 26. A reversible traveler 28 travels linearly along the slides 22a, 22b from the base 26 along a plurality of aligned zipper elements 29 to a pair of stops 30a, 30b. As the traveler is advanced from the base 26 to the stops 30a, 30b, zipper elements 29 interlock to bind the respective slides of the zipper.

The first attachment strip 22 is affixed to the first panel zipper flap 14, offset from an outer edge, by an attachment seam. Similarly, the second attachment strip 24 is affixed to the second panel zipper flap 16, offset from an outer edge, by an similar attachment seam.

Next, FIG. 3 shows an inner fly cover flap 32 formed by attaching the first panel zipper flap 14 to the first panel 10 by a first fly cover finish seam, shown herein as 34. Similarly, in conjunction with FIG. 4, an outer fly cover flap 40 is formed by attaching the second panel zipper flap 16 to the second panel 12 by a second fly cover finish seam, shown herein as 44.

As shown in FIG. 4, a crotch seam 50 is thereafter extended laterally downward in an otherwise conventional manner, herein shown as a finished reversible seam for use with reversible zipper-fly pants.

Finally, as shown in FIG. 5, a finished pant is shown in which a symmetric reversible zipper fly cover, being symmetric whether formed "inside" or "outside" without resorting to the use of a "patch" type fly flap on any side. It is a feature of the present invention to provide an improved reversible zipper fly cover that is aesthetically consistent on both the inside and outside of the garment, as well as being aesthetically pleasing on both sides.

2. Operation of the Preferred Embodiment

To use the present invention, in accordance with a preferred embodiment, an improved reversible zipper fly cover is formed, and must be designed prior to manufacturing in that a unique method for manufacturing the same is provided. Particularly, because the zipper closure of a pant generally is formed having a zipper-fly cover, in order to manufacture such a garment utilizing conventional reversible zippers the designer must necessarily designate an "in" side and an "out" side prior to manufacture.

According to the present method, the "in" side is substantially aesthetically equivalent to the "out" side. Thus, aesthetic compromises need not be incurred in designing a reversible, zipper closed pant garment.

The foregoing descriptions of specific embodiments of the present invention have been presented for purposes of illustration and description. They are not intended to be exhaustive or to limit the invention to the precise forms disclosed, and obviously many modifications and variations are possible in light of the above teaching. The embodiments were chosen and described in order to best explain the principles of the invention and its practical application, to thereby enable others skilled in the art to best utilize the invention and various embodiments with various modifications as are suited to the particular use contemplated. It is intended that the scope of the invention be defined by the Claims appended hereto and their equivalents. Therefore, the scope of the

invention is to be limited only by the following claims.